### PATENT COOPERATION TREATY



# **PCT**

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FP2613PCT	FOR FURTHER ACT	TION	See Form PCT/IPEA/416			
International application No.	International filing date	(day/month/year)	Priority date (day/month/year)			
PCT/JP2003/011972	19 September 200	3 (19.09.2003)	19 March 2003 (19.03.2003)			
International Patent Classification (IPC) or a G01N 33/50, 33/48	national classification and	IPC				
Applicant HAMAMATSU FOUNDATION FOR SCIENCE AND TECHNOLOGY PROMOTION						
This report is the international prelication Authority under Article 35 and transport to the second se	iminary examination reports in the minimary examination reports and the applicant are	rt, established by this coording to Article 3	s International Preliminary Examining 6.			
2. This REPORT consists of a total of	f 4 sheets,	including this cover	sheet.			
3. This report is also accompanied by	ANNEXES, comprising:					
a. (sent to the applicant an	d to the International Bur	eau) a total of	sheets, as follows:			
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).						
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.						
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))  , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).						
This report contains indications relating to the following items:						
Box No. I Basis of the	report					
Box No. II Priority						
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
Box No. IV Lack of unity of invention						
Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
Box No. VI Certain documents cited						
Box No. VII Certain defects in the international application						
Box No. VIII Certain observations on the international application						
Date of submission of the demand		Date of completion	of this report			
05 July 2004 (05.07.2004)		06	January 2005 (06.01.2005)			
Name and mailing address of the IPEA/JF	,	Authorized officer				
Facsimile No.		Telephone No.				

Translation

International application No.

PCT/JP2003/011972

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Box No. I	Basis of the report				
otherwi	egard to the language, this report is based on the international application in the language in which it was filed, unless vise indicated under this item.				
	This report is based on translations from the original language into the following language, which is language of a translation furnished for the purpose of:				
	international search (under Rules 12.3 and 23.1(b))				
Ì	publication of the international application (under Rule 12.4)				
İ	international preliminary examination (under Rules 55.2 and/or 55.3)				
\ 					
furnish and are	regard to the <b>element</b> s of the international application, this report is based on (replacement sheets which have been hed to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" re not annexed to this report):				
	The international application as originally filed/furnished				
[] 1	the description:				
	pages, as originally filed/furnishe				
	the claims:				
}	pages, as originally filed/furnished, as originally filed/furnished, as amended (together with any statement) under Article				
I -	F-5-				
	pages* received by this Authority on pages* received by this Authority on				
l —					
	the drawings:  pages , as originally filed/furnished.				
l '	pages				
1	pages* received by this Authority on received by this Authority on				
	a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.				
3.	The amendments have resulted in the cancellation of:				
	<u> </u>				
1	the description, pages				
	the claims, Nos.				
1	the drawings, sheets/figs				
	the sequence listing (specify):				
	any table(s) related to sequence listing (specify):				
4.	This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).  the description, pages the claims, Nos. the drawings, sheets/figs the sequence listing (specify): any table(s) related to sequence listing (specify):				
* If iten	m 4 applies, some or all of those sheets may be marked "superseded."				

PCT/JP03/11972

	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
1 Statement	

Statement Novelty (N)	Claims	4-12	YE
1.0.1	Claims	1-3	NO
Inventive step (IS)	Claims		YE
2,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Claims	1-12	NC
Industrial applicability (IA)	Claims	1-12	YE
	Claims		NC

2. Citations and explanations (Rule 70.7)

Document 1: Hiroki Nakagawa, Biotesting Illustrated, 2. Idenshi Kaisetsu no Kiso, Shujunsha Co., Ltd., 26 September, 1995, pages 153 to 166.

Document 2: CARCINOGENESIS, VOL. 19, NO. 2 91998), p. 253-157.

Document 3: CANCER RESEARCH, VOL. 55, NO. 17, 1995), p. 3785-3789.

Document 4: Japanese Journal of Gastroenterology, Vol. 99, Special Extra Issue, 20 September, 2002, page A634, Sho P-379.

Claims 1 to 3

Document 1 cited in the ISR describes a method for preparing a RNA sample without a process of cell component separation by freezing the sampled biological sample and homogenizing in the presence of a guanidine salt, in the same manner as in the embodiment of the specification of the present application (see "2. AGPC Method").

Therefore, the inventions of claims 1 to 3 do not appear to possess novelty based on document 1.

Claims 4, 5

Document 2 cited in the ISR describes a process comprising the steps of extracting RNA from an excrement sample and conducting colon cancer detection from the inversely transferred cDNA.

Therefore, using the preparation method described in document 1 when the RNA extraction is conducted from an excrement sample, thereby obtaining the configuration of the inventions described in claims 4 and 5, could have easily been conceived by a person skilled in the art.

Therefore, the inventions of those claims do not appear to involve an inventive step.

Claim 6

Document 3 cited in the ISR describes that COX-2 is a colon cancer marker, and making the measurement target COX-2 could have easily been conceived by a person skilled in the art.

Therefore the invention of claim 6 does not appear to involve an inventive step.

Claims 7 to <u>12</u>

Employing the reagents used for preparation and detection in the form of a kit can be appropriately made by a person skilled in the art.

Therefore, the inventions of claims 7 to 12 do not appear to involve an inventive step.

Further, document 4 cited in the ISR describes conducting colon cancer detection by inversely transferring RNA prepared from a frozen excrement sample and preparing COX-2.

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP03/11972

Box No. VIII Certain observations on	the international applicatio	n					
The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  (1) The inventions of claims 7 to 12 relate to a kit. However, what elements are comprised in the 'kit" is not clear and these claims are ambiguous.							
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